## IN THE ABSTRACT OF THE DISCLOSURE:

A method for producing a triarylsulfonium salt having a structure that only one of the three arobatic rings of the three aromatic rings on the cationic portion is different from the other two aromatic groups, and which is useful, for example, as an acid-generating agent for a resist or a photo cationic polymerization initiator, represented by formula [4]:

$$\begin{array}{cccc}
& & & & \\
& & & \\
& & & \\
R - S & A_1 & A_2 & A_3 & A_4
\end{array}$$

wherein, R<sup>†</sup> represents hydrogen, halogen, alkyl, haloglkyl, alkoxy, acyl, hydroxyl, amino, nitro or cyano, R represents an aryl which may have a substituent different from one represented by R<sup>†</sup>, and A<sup>†</sup> represents a strong acid residue,

comprising by reacting a diaryl sulfoxide represented by formula [1]:

$$R^{1} \xrightarrow{\text{II}} R^{1} \qquad [1]$$

P:\10-07\wkp-003-pto-resp-111-draft.wpd

- wherein, R<sup>†</sup>-represents the same as above,

and an aryl Grignard reagent represented by formula [2]:

## RMgX [2]

wherein, X represents a halogen; R represents the same as above,

in the presence of an activator with high affinity for oxygen of 3 to 7.5 equivalents relative to the above diaryl sulfoxide, and then reacting the resultant reaction mixture with a strong acid represented by formula [3]:

## HA<sub>1</sub> [3]

wherein, At represents the same as above, or a sait thereof.